THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A peritoneal dialysis solution which comprises a water solution with a pH compatible with the intended use of the product, with electrolytes, including sodium, chloride, calcium and magnesium of a suitable and compatible compositions and one or a combination of acetylated or deactylated amino sugars, such as glucosamine, N–acetylglucosamine, galactosamine, N–acetylgalactosamine, mannosamine, N–acetylmannosamine as monomers or oligomers of 2 to 12 carbohydrate units alone or in combination with glucose and/or sodium lactate, malate, acetate, succinate and/or iduronic acid and/or glucuronic acid.

2. The solution of claim 1 in which the pH is in the range of 5 – 7.4 and the sodium concentration is present in the range of 115 – 140 mEquiv/L, calcium is present in the range of 0.6 mEquiv/L, chloride is present in the range of 100 – 145 mEquiv/L, magnesium is present in the range of 0 –2 mEquiv/L, lactate, malate, acetate or succinate in the range of 30 – 45 mEquiv/L.

3. The solution of claim 1 in which the osmotically active agent is and amino sugar taken from the following group of compounds of glucosamine, N–acetylglucosamine, galactosamine, N–acetylgalactosamine, mannosamine or N–acetylmannosamine.

4. The solution of claim 3 in which the osmotically active agents are present at a concentration of 0.5 – 5.0 % (w/v).

5. The solution of claim 3 of which the osmotically active agents are present at the concentrations specified in claim 4 together with glucose at a concentration of 0.5 to 5.0% (w/v).

6. The solution of claim 1 in which the osmotically active agents are present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

7. A peritoneal dialysis solution comprising an effective amount of an acetylate or deacetylated amino sugar and/or combinations thereof.

8. The peritoneal dialysis solution of claim 7 wherein the amino sugar is N-acetylglucosamine (NAG).

9. The peritoneal dialysis solution of claim 7 wherein the amino sugar is selected from glucosamine, N–acetylglucosamine, galactosamine, N–acetylgalactosamine, mannosamine, N–acetylmannosamine as monomers or oligomers of 2 to 12 carbohydrate units alone or in combination with glucose and/or sodium lactate, malate, acetate, succinate and/or iduronic acid and/or glucuronic acid.

10. The solution of claim 7 in which the pH is in the range of 5 – 7.4 and the sodium concentration is present in the range of 115 – 140 mEquiv/L, calcium is present in the range of 0.6 mEquiv/L, chloride is present in the range of 100 – 145 mEquiv/L, magnesium is present in the range of 0 –2 mEquiv/L, lactate, malate, acetate or succinate in the range of 30 – 45 mEquiv/L.

11. The solution of claim 8 in which the pH is in the range of 5 – 7.4 and the sodium concentration is present in the range of 115 – 140 mEquiv/L, calcium is present in the range of 0.6 mEquiv/L, chloride is present in the range of 100 – 145 mEquiv/L, magnesium is present in the range of 0 –2 mEquiv/L, lactate, malate, acetate or succinate in the range of 30 – 45 mEquiv/L.

12. The solution of claim 9 in which the pH is in the range of 5 – 7.4 and the sodium concentration is present in the range of 115 – 140 mEquiv/L, calcium is present in the range of 0.6 mEquiv/L, chloride is present in the range of 100 – 145 mEquiv/L, magnesium is present in the range of 0 –2 mEquiv/L, lactate, malate, acetate or succinate in the range of 30 – 45 mEquiv/L.

13. The solution of claim 7 in which the amino sugar is taken from the following group of compounds of glucosamine, N–acetylglucosamine, galactosamine, N–acetylgalactosamine, mannosamine or N–acetylmannosamine.

14. The solution of claim 9 in which the amino sugar is taken from the following group of compounds of glucosamine, N–acetylglucosamine, galactosamine, N–acetylgalactosamine, mannosamine or N–acetylmannosamine.

15. The solution of claim 7 in which the amino sugar is present at a concentration of 0.5 – 5.0 % (w/v).

16. The solution of claim 8 in which the amino sugar is present at a concentration of 0.5 – 5.0 % (w/v).

17. The solution of claim 9 in which the amino sugar is present at a concentration of 0.5 – 5.0 % (w/v).

18. The solution of claim 10 in which the amino sugar is present at a concentration of 0.5 – 5.0 % (w/v).

19. The solution of claim 11 in which the amino sugar is present at a concentration of 0.5 – 5.0 % (w/v).

20. The solution of claim 12 in which the amino sugar is present at a concentration of 0.5 – 5.0 % (w/v).

21. The solution of claim 13 in which the amino sugar is present at a concentration of 0.5 – 5.0 % (w/v).

22. The solution of claim 14 in which the amino sugar is present at a concentration of 0.5 – 5.0 % (w/v).

23. The solution of claim 7 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

24. The solution of claim 9 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

25. The solution of claim 10 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

26. The solution of claim 11 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

27. The solution of claim 12 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

28. The solution of claim 13 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

29. The solution of claim 14 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

30. The solution of claim 15 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

31. The solution of claim 16 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

32. The solution of claim 17 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

33. The solution of claim 18 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars

comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

34. The solution of claim 19 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

35. The solution of claim 20 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

36. The solution of claim 21 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.

37. The solution of claim 22 in which the amino sugar is present as monomers of the amino sugars specified or are oligomers of these amino sugars comprising 2 – 12 carbohydrate units, alone or together with glucose as detailed in claim 5.